MOXA SoftDVR™ Lite/Pro

User's Manual

www.moxa.com/product

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Moxa Networking Co., Ltd.
Tel: +886-2-29101230 Fax: +886-2-29101231
www.moxa.com
support@moxanet.com (worldwide)
support@moxa.com (The Americas)

SoftDVR™ Lite/Pro
User's Manual

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Before getting started

Before using MOXA SoftDVR™ Pro/Lite IP Surveillance Software, pay attention to the following items.

- After opening the box, compare the contents of the box with the **Package Checklist in Chapter 1.** Notify your sales representative if any of the items is missing or damaged.
- To prevent damage or problems caused by improper usage, read the **System Requirements** section in **Chapter 1, Introduction,** and read **Chapter 2**, **Getting Started**, before installing SoftDVR™.
- If you ecounter a system error, and the system does not recover easily, re-insall the software, or call our technical support.

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1
Introduction

MOXA SoftDVR™ Pro IP Surveillance Software is designed for IP Surveillance systems that use MOXA VPort 2100 series Video Servers as the Distributed Video Networking solution. With the help of MOXA SoftDVR™, system integrators can seamlessly integrate other applications, such as I/O Sensors and Alarms, with CCTV Systems over an IP-based network.

The following topics are covered in this chapter:

- **Overview**
- **Product Features**
  - Administration and Video Server Control
  - Viewing
  - Recording
  - Alarm
- **Typical Application**
- **System Requirements**
  - SoftDVR™Pro
  - SoftDVR™Lite

Overview

MOXA SoftDVR™ Pro IP Surveillance Software is designed for IP Surveillance systems that use MOXA VPort 2100 Series Video Servers as the Distributed Video Networking solution. With the help of MOXA SoftDVR™, system integrators can seamlessly integrate other applications, such as I/O Sensors and Alarms, with CCTV Systems over an IP-based network.

Besides, there is a MOXA SoftDVR™ Lite version, which is bundled free with MOXA VPort 2100 Series Video Servers, to provide basic viewing, camera control, recording and system management in a single PC. The maximum cameras is 4 and the viewing format only support 1, 4 in SoftDVR™ Lite.

Versatile viewing formats
Up to 16 cameras can be added in a SoftDVR™ Pro system, and users can set the viewing format in 1, 4, 6, 8, 9, 10, 13, 16 in a window as needed.

Remote Access from a standard browser
MOXA SoftDVR™ Pro is designed as a client/server-based system with the network connectivity for client users. It can be remotely accessed by using any standard web browser to view and playback video images.

Recording & Storing over the Ethernet/ Internet
Administrators can set up the video recording actions in round-the-clock or event triggered mode of MOXA SoftDVR™ Pro. All of recorded video files are MPEG4 AVI format and can be saved in the hard disk of a local PC or a network storage server, such as NAS, RAID, etc.

Scheduling jobs for recording and remote services
For intelligent surveillance requirements, MOXA SoftDVR™ Pro provides a scheduling jobs function. Administrators can set up the time schedule of remote services and recording actions for each camera to manage the system performance and network traffic efficiently.

Alarm messages triggered and sent by events
MOXA SoftDVR™ Pro is equipped with auto-alarm triggering and transmitting functions to make the IP surveillance system more intelligent. Alarms can be triggered by VMD, video failure, communication failure, system errors, storage failure, storage full, GPI, and then sent by email or GPO, or can trigger the PTZ camera to a preset position.

Advanced VMD (Video Motion Detection)
MOXA SoftDVR™ Pro provides advanced area-selectable VMD (Video Motion Detection) for setting up an intelligent video surveillance system. By separating the image into 20 x 20 small areas, administrators can choose an target area and fine tune VMD's sensitivity.

Flexible I/O management for external devices
There are 4 DI and 2 DO signal management functions in MOXA SoftDVR™ Pro. By setting up conditions for triggering and actions of DI/DO devices, such as sensors or alarms, administrators can build an automatic video surveillance system combined with environment controlling and monitoring functions.

Video Server Configuration & System Management
MOXA SoftDVR™ Pro can configure the VPort 2100 Series Video Servers directly. In addition, user privilege management is also provided for system administrators to set up the viewing & camera controlling privilege, system operation and remote access for each user.

E-map for the convenient camera management
Administrators can use the E-map to layout cameras.

Product Features

Administration and Video Server Control

- Supports MOXA VPort series Video Server
- Can configure each camera's name, video quality, and video resolution separately
- Supports remote firmware upgrade
- User level protection by password (maxiumun 32 users)
- Supports PTZ camera controls
- Automatically resumes viewing and recording after system reboot
- Cameras can be managed easily with your own e-map

Viewing

- Supports 1, 4, 6, 8, 9, 10, 13, 16 camera viewing formats (maximum of 16 cameras in the list)
- Zoom-in/Zoom-out function for individual cameras when playing back images
- View and Record by schedule or event triggering for each camera
- Historical playback by time or event
- Take snapshots in playback mode to get JPEG images for printing or to save as evidence
- Can adjust the contrast, brightness, sharpness, blur, and grayscale of the snapshot image

Recording

- Record video in AVI format—compatible with popular media players
- To save a vast amount of storage space, use MPEG4 compression to record video files
- Dynamically adjust recording frame rate over the LAN/Internet to match the real frame transmit speed, to keep the video synchronized with the actual time
- Recyclable override of hard disk space in FIFO (First-In-First-Out) sequence
- Recorded video files can be stored in a local PC or Windows-based networked storage server

Alarm

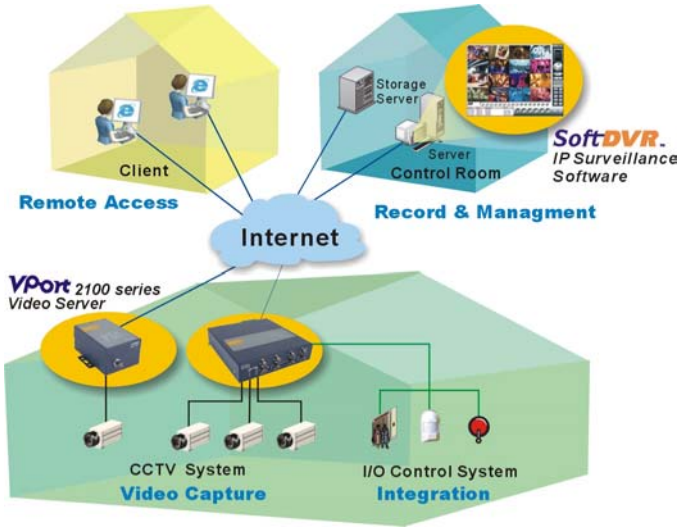
- Can set up Video Motion Detection (VMD) function for each camera separately
- Selectable VMD area for each camera
- Alarm can be triggered by VMD, video failure, communication failure, system fault, storage failure, storage full, GPI, and then sent by email or GPO, or trigger PTZ camera to a preset position
- Can review historical system status via system log

NOTE

SoftDVR™ Lite is different from SoftDVR™ Pro in the followings:

1. SoftDVR™ Lite supports only 1 to 4-ch (Quad) viewing format; max. 4 cameras.
2. SoftDVR™ Lite has no remote service, such as viewing from a web browser or storing in a network hard disk.
3. SoftDVR™ Lite's VMD in full image comparison
4. SoftDVR™ Lite has no I/O sensor & alarm management for alarm messages.

Typical Application



System Requirements

SoftDVR™ Pro

- MS Windows 2000/XP or above
- Intel 2.4 GHz Pentium 4 or above
- 256 MB SDRAM or above
- VGA card with AGP (2X or above) interface
- Minimum of 32 MB Display Memory
- DirectX 8.1 or above

Performance reference

CPU		Pentium IV 2.4 GHz
Memory		256 MB
Monitor		High Color 16-bit 1024 x 768
Video Card		AGP 4X RAM: 64 MB
Image		352 x 240, Good Quality
OS		MS-Windows 2000 Professional SP4
DirectX		9
Cameras		16
Total FPS	**View**	Up to 180 images/second
	View+Record	Up to 90 images/second

SoftDVR™ Lite

- MS Windows 2000/XP
- Intel 1 GHz Pentium 3
- 128MB SDRAM or above
- VGA card with AGP AGP (2X or above) interface
- Minimum of 32 MB Display Memory
- DirectX 8.1 or above

Performance reference

CPU		Pentium III 1.0 GHz
Memory		256 MB
Monitor		High Color 16-bit 1024 x 768
Video Card		AGP 2X RAM: 32 MB
Image		352 x 240, Good Quality
OS		MS-Windows 2000 Professional SP4
DirectX		9
Cameras		4
Total FPS	**View**	Up to 50 images/second
	View+Record	Up to 20 images/second

NOTE Video rate performance is greatly influenced by the PC hardware resources, graphics processing ability, and network management status. We strongly recommend that the server used to run SoftDVR™ is suitable for multimedia applications, and the network bandwidth is guaranteed for better video frame rate.

2

Getting Started

This chapter includes information about how to install SoftDVR™ Pro and SoftDVR™ Lite. The following topics are covered:

- **Software Installation**
  - MOXA SoftDVR™ Pro Installation
  - MOXA SoftDVR™ Lite Installation
- **Using SoftDVR™ Pro/Lite for the First Time**

Software Installation

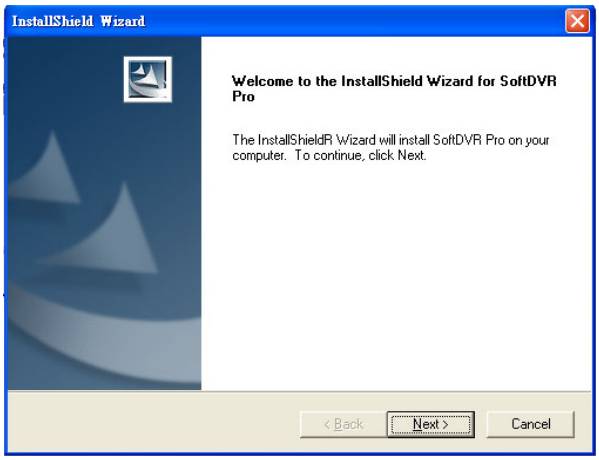
MOXA SoftDVR™ Pro Installation

Before Installing the Software

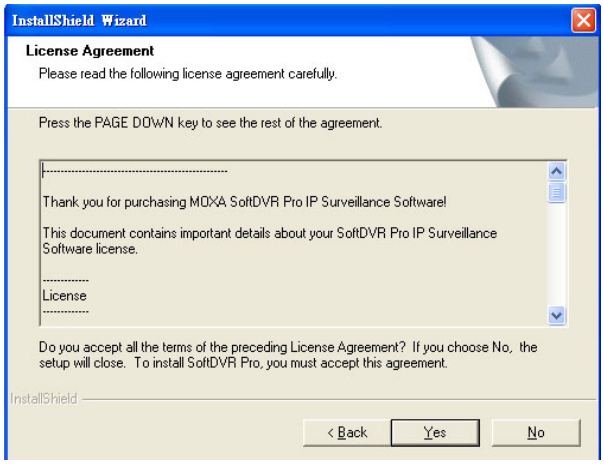
1. Make sure that your PC has installed DirectX 8.1 or above.
2. Insert the enclosed CD.
3. Click on **SoftDVR™ Pro.exe** to run the installation file.

Starting the Installation

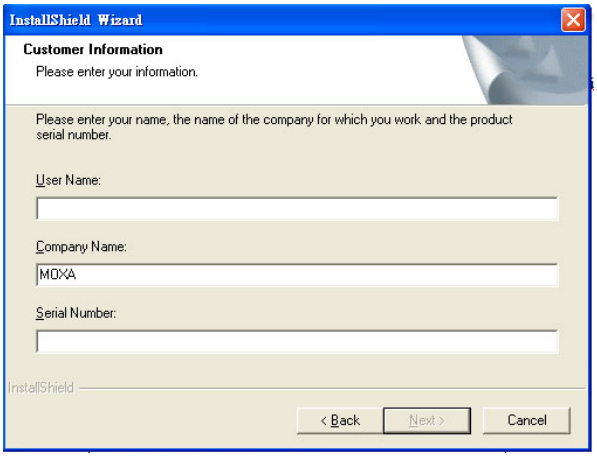
1. The **Installation Wizard** will start. Click on **Next** to continue.


InstallShield Wizard
Welcome to the InstallShield Wizard for SoftDVR Pro
The InstallShieldR Wizard will install SoftDVR Pro on your computer. To continue, click Next.
< Back
Next >
Cancel

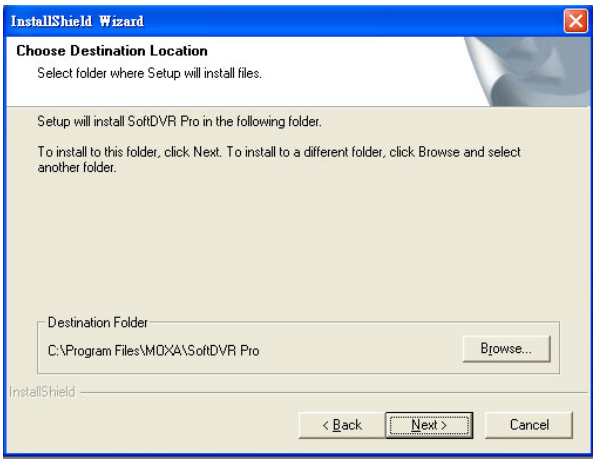
2. The **License Agreement** window will open next. Click on **Yes** to continue.


InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
Thank you for purchasing MOXA SoftDVR Pro IP Surveillance Software!
This document contains important details about your SoftDVR Pro IP Surveillance Software license.
License
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install SoftDVR Pro, you must accept this agreement.
InstallShield
< Back
Yes
No

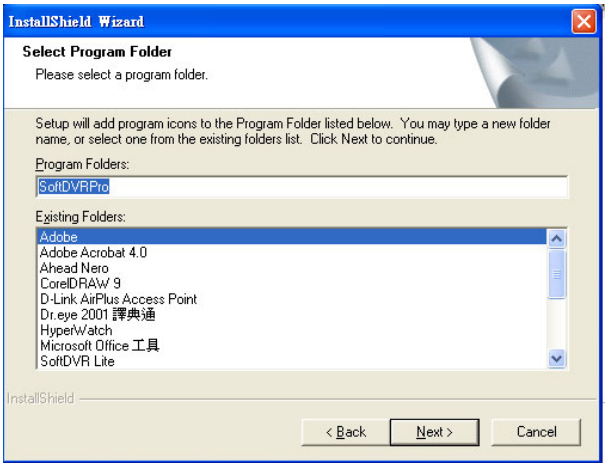
3. Type in the **User Name**, **Company Name** and the product **Serial Number** (11 digits in total printed on the Key Pro), then click on **Next**.



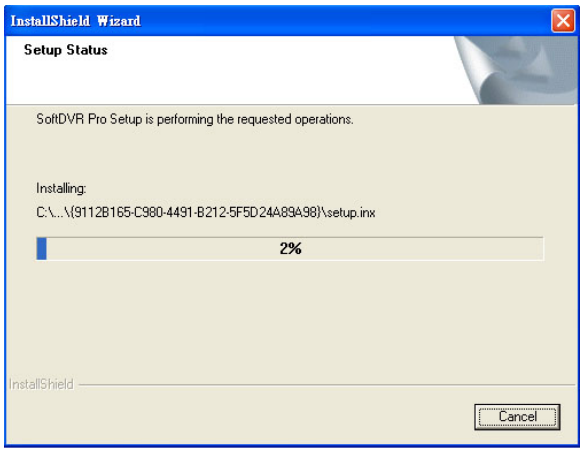
4. The **Choose Destination Location** window will open next. Select the folder you wish to install SoftDVR™Pro to, and click on **Next** to continue.


InstallShield Wizard
Choose Destination Location
Select folder where Setup will install files.
Setup will install SoftDVR Pro in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\MOXA\SoftDVR Pro
Browse...
InstallShield
< Back
Next >
Cancel

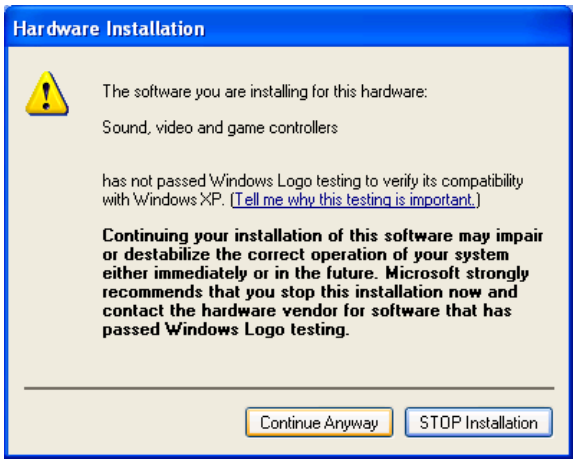
5. The **Select Program Folder** window will open next. Select the program folder that you wish the wizard to create an icon for, and then click on **Next** to continue.



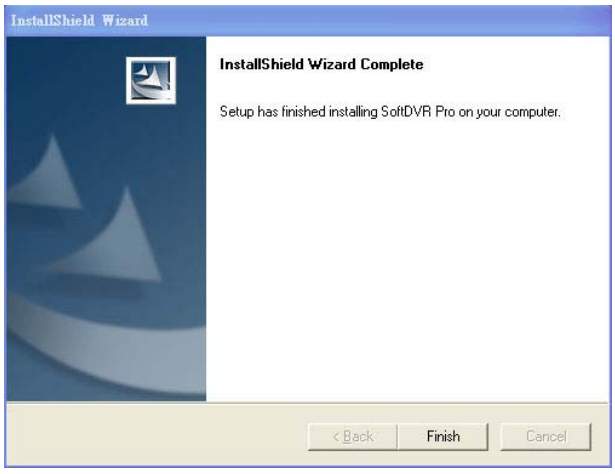
6. The wizard will start the installation process.



A digital signature request window will appear during the installation process. Click on **Yes** to continue the installation.


Hardware Installation
The software you are installing for this hardware:
Sound, video and game controllers
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

7. The **InstallShield Wizard Complete** window will open next. Click on **Finish** to complete the installation.



MOXA SoftDVR™ Lite Installation

Installation process of MOXA SoftDVR™ Lite is the same as that of MOXA SoftDVR™ Pro except for the product serial number.

Using SoftDVR™ Pro/Lite for the First Time

Before using SoftDVR™ Pro, you must plug a **Key Pro** into the printer port to enable software operation. The Key Pro is included in the SoftDVR™ Pro CD box. The driver for this Key Pro is installed automatically during the SoftDVR™ Pro installation process.

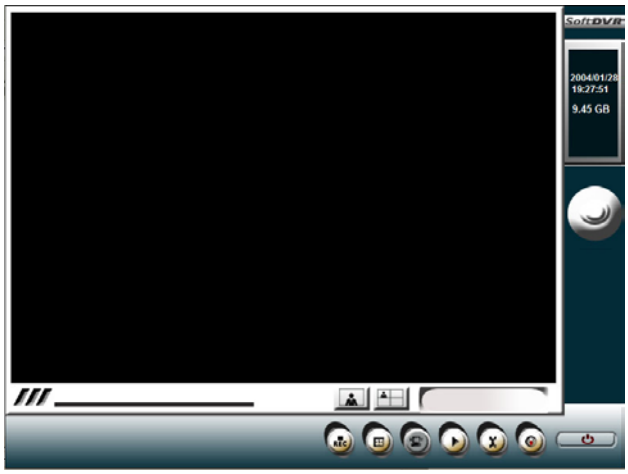
NOTE This Key Pro protects the SoftDVR™ Pro license. It will not influence the normal function of the printer port.

To launch the SoftDVR™ Pro/Lite program, click on **Start→Program Files→SoftDVR™ Pro/SoftDVR™ Lite**. The main page will open next. Its resolution is 1024 × 768, without any video image. Click on the **Application Settings** button to set up the VPort and cameras.

NOTE SoftDVR™ Pro and SoftDVR™ Lite can be installed in the same PC or server, but each program should be launched individually, or you may have problems in using these programs at the same time.

Main Page of SoftDVR™ Pro (Resolution: 1024 x 768)

Main Page of SoftDVR™ Lite (Resolution: 800 x 600)



3

General Operations

This chapter includes information about SoftDVR™ Pro's general operations.

The following topics are covered:

- **Authentication**
- **Functions**
  - Viewing
  - Camera Actions
  - Recording
  - Scheduling
  - Remote Service
  - Playback
  - Application Settings
  - Camera Map
  - Camera and Alarm Actions Log Window
  - Repair Database
  - Alarm History (Only for SoftDVR™ Pro)

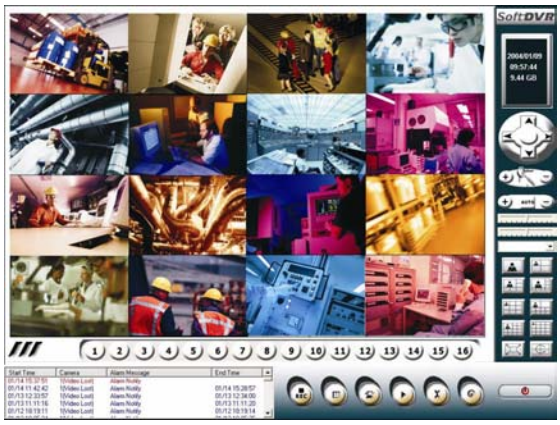
Authentication

If administrator or user management has been configured in the **User Management** mode, an authentication request will appear when you log-in SoftDVR™ Pro. For administrators, enter the user name as **admin** or **administrator**, and then enter the password that you set up. For other users, type the given user name and password.

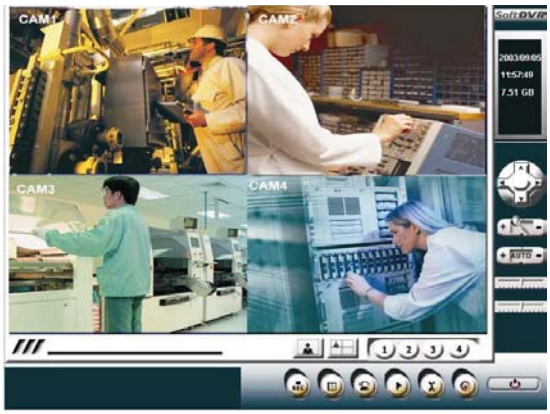
Administrators and users can directly use the Logout/Login function via the Exit/Minimize button located on the bottom right corner of the main page to exit/access SoftDVR™ Pro.

Functions

SoftDVR™ Pro's Main Screen



SoftDVR™ Lite's Main Screen



Viewing

SoftDVR™Pro has 8 viewing formats: 1, 4, 6, 8, 9, 10, 13, or16 channels on the screen. You can easily change the viewing formats by using **Camera View** buttons. In addition, **Full Screen** and **Camera Scan** are provided for customized viewing.

When viewing video images, users can directly click on the images to enlarge or reduce the size of the images.

Camera View Buttons

1 view 4 views 6 views 8 views 9 views 10 views 13 views 16 views

Full Screen View Button

Camera Scan

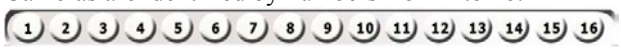
SoftDVR™ Lite has only 2 kinds of viewing formats, 1-and 4-channel, since SoftDVR™ Lite can only include maximum of 4 cameras. And there are no **Full Screen View** and **Camera Scan** buttons. However, you can easily find the **Camera View** buttons at the bottom of the Main Screen.

NOTE To identify which camera is in multiple viewing window, set up a camera ID when you add a new camera in **Application Setting/Video Server Configure**, and click the **Camera ID** in the **Camera Caption** area in **Application Setting/General Setting**.

Camera Actions

There is a **Camera Selection List** located at the bottom of the Main Screen, which allows users to select a camera by clicking on the camera ID buttons to see actions of the selected camera. The selected camera will go to the 1st display position in multiple viewing modes.

Camera ID Buttons
Cameras are identified by numbers from 1 to 16.



Camera Display

	Camera ID Buttons in white indicate the cameras are alive.
	Camera ID Buttons in read indicate the cameras are not connected.

Camera Operation Buttons
Users can use the following buttons to control or operation each camera. If a camera is equipped with PTZ control, the PTZ operation button will be shown at the right side of the Main Screen.

PAN/ TILT ZOOM FOCUS PAN Speed TILT Speed Preset Location

Recording

Administrators can use the following recording buttons to start recording actions.

Recording inactive Recording active

There are 3 types of recording, which you can activate with each camera separately:

1. **Round-the-clock**: recording all the time.
2. **Motion detect**: recording only when VMD is triggered.
3. **Generic input trigger**: recording when DI sensors are triggered.

Administrators can set up the 3 kinds of recording actions in **Application Setting/Recording** page.

Scheduling

To activate the scheduling function, click on the following Scheduling buttons.

Scheduling inactive

Scheduling active

The 5 features for schedulitng are as follows:

1. Set up the time period by time and weekday.
2. Action items include recording and remote access
3. Camera selectable
4. Details of scheduling tasks are described in the task remarks.
5. The editable scheduling task list is provided.

Administrators can set up scheduling tasks on the **Application Setting/Scheduling** page.

NOTE The time period setting for **Scheduling jobs** is based on 24-hour time. If you wish to set an 8-hour time task, which will run overnight, you can set up 2 different scheduling jobs, such as 20:00-23:59, and 00:00-04:00.

NOTE A **Scheduling job** also includes recording and remote service. For this reason, the **Recording and Remote Service** buttons on the Main Screen will turn dark to disable the recording and remote service function when the **Scheduling** function is active. This is to avoid the conflict caused by the scheduling task and the manual operation of recording and remote service.

Remote Service

MOXA SoftDVR™ Pro has a remote service function that allows client users to access SoftDVR ™ Pro from a remote site. Administrators can activate the **Remote Service** function to let client users view real-time video images and playback of recorded files. Client users can type http://IP Address of SoftDVR™ Pro's server in the address input box of a web browser to use the Remote Service function.

Remote Service inactive

Remote Service active

Main purposes of Remote Access function are as following

1. To view real-time video images of each camera
2. To view playback of historic recorded files
3. To use PTZ camera control

Steps to access SoftDVR™ Pro's web service

1. Type http://IP address of SoftDVR™ Pro's server:web server port number (e.g. http://192.168.2.1:82) in the address input box of a web browser. If the web server port number is the same as the system default setting, ignore it.
2. Input user's name and password
3. The web Main Page will open next.

Administrators can set up user's privilege to the **Remote Service** in **Application Setting/User Management** page.

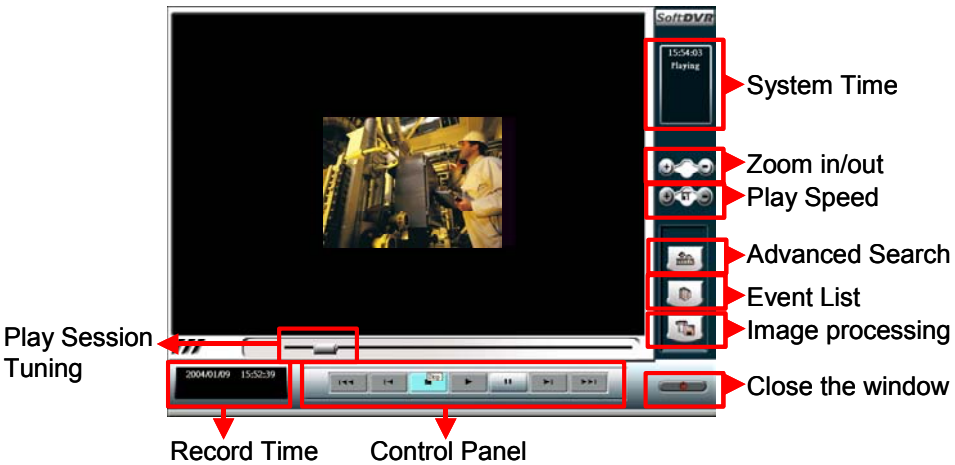
NOTE MOXA SoftDVR™ Lite IP Surveillance Software is a PC version for using on a single PC. So, the **Remote Service** function would be disabled on the Main Screen.

NOTE Remote Service provides client users with remote accessibility of SoftDVR™ Pro. However, since a lot of system resources are needed for SoftDVR™ Pro's viewing and recording functions, the video rate performance of remote service is greatly influenced by the number of cameras in the SoftDVR™ Pro system, the network bandwidth, and how many users access the SoftDVR™ Pro server at the same time.

Playback

Administrators and users with authorization can view the playback of historic recorded files via the **Playback** function. To activate the **Playback** function, click on the **Playback** button on the Main Screen. A **Security Playback** window will open to play back recorded files.

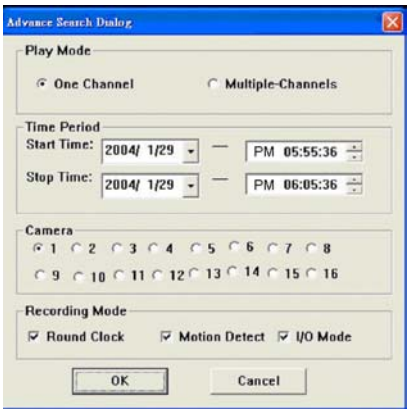
Playback



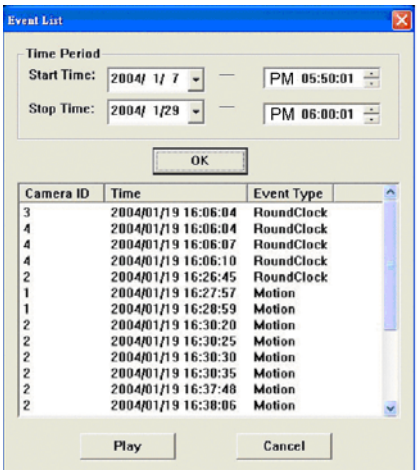
Steps to use Playback function

1. Use **Advanced Search** or **Event List** to search the historic recorded files.

   Advanced Search
   Based on time intervals and camera numbers, users can search recorded files to play and review. Click on **OK** to directly play recorded files.



   Event List
   SoftDVR™ Pro/Lite has 3 recording actions. For this reason, Event List enables users to search recorded files by events. When the system finishes searching, you can select the recorded files you want to play.



2. Use the buttons on the **Control Panel** to perform operations.

3. You can use **Zoom In/Out**, **Play Speed**, **Image Processing**, and **Play Section Tuning** functions for advanced operations.

   Image Processing
   Users can take JPEG snapshots by using Image Processing function when a recorded file is in playback mode. The snapshot window will open for you to edit, save and print the JPEG snapshot.

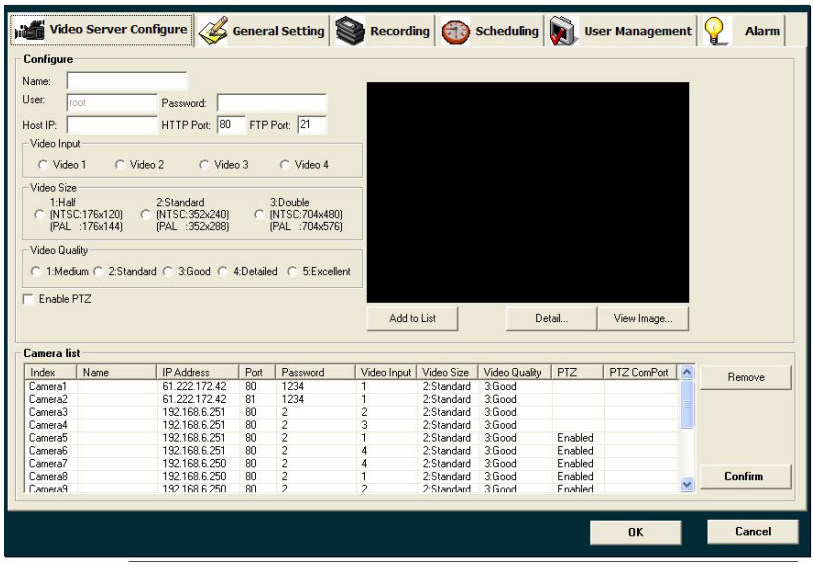
Zoom In/Out
Users can enlarge or diminish the playing video images.

Play Speed
Users can increase the playing speed of video streams.

Play Section Tuning
Users can fine tuning the playing section by moving this bar when a recorded video image is in playback mode.

Apart from the functions mentioned above, some other system information is also shown on this window. **System Time** indicates current time. **Record Time** shows the duration of the playing file.

Application Settings



There are 6 major setting categories for SoftDVR™ Pro, and 5 for SoftDVR™ Lite (SoftDVR™ Lite does not have **Alarm** category.)

1. **Video Server Configure**: Administrators must configure MOXA VPort Series Video Servers and cameras to acquire video images before using the functions provided by MOXA SoftDVR™ Pro/Lite.
2. **General Setting**: From the **General Setting** page, administrators can configure the SoftDVR™ Pro/Lite server's host name, the start-up status, storage disk locations, camera caption, camera display, email addresses to send alarms to, and camera scanning intervals.
3. **Recording**: There are 2 major settings on the **Recording** page. One is the recording setting for each camera, and the other is VMD settings.
4. **Scheduling**: Administrators can set up the time period, weekday, tasks, and camera enabling on ths page.
5. **User Management**: The administrator's password can be set up on this page, as well as the users list that can include up to 32 users. Administrators can also configure camera operation and the remote service for each user on this page.
6. **Alarm**: SoftDVR™ Pro provides an advanced alarm-triggering system to help system integrators build an intelligent video surveillance system based on environment situations. VPort 2100 Series Video Servers have the DI/DO design that can connect to devices, allowing administrators set up a complex alarm system by integrating cameras, PTZ contro. VMD, DI sensors, recording actions, DO alarms, email, and alert sounds.

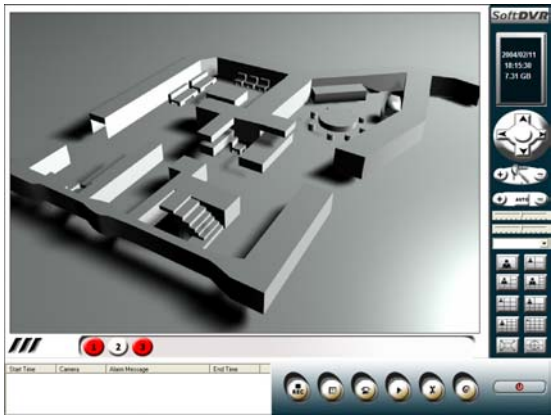
For more details about **Application Settings**, refer to the chapter 4.

Camera Map

SoftDVR™ Pro/Lite provides a graphic E-map function for camera management. Administrators can import a layout image and place the cameras on the image for easy management of the number of cameras.

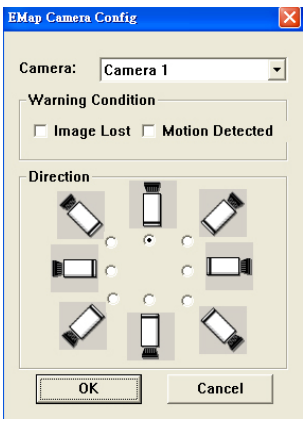
Camera Map

To activate this function, click on the **Camera Map** button. A window will open to show the graphic layout image. Administrators can use this function to manage the cameras easily.



Users can use 2 kinds of functions to customize the camera E-map. Click on the left button of the mouse, 2 options will appear: **Background** and **Add camera**.

1. **Background**: Administrators can import different format layout images, such as JPEG, Bitmap, GIF, etc.
2. **Add camera**: A window will open for administrators to configure a new camera. You can set up warning conditions, including Image Lost and Motion Detected, and the direction that the camera is facing. When a selected warning condition occurs, the number of that camera will flash for your attention.

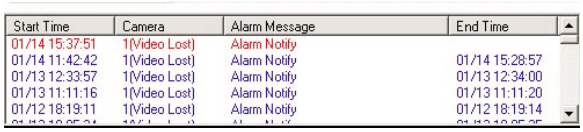


After finishing cameras' configuration, 4 options will appear in the selection list when you click on a camera: **Setting Camera**, **Remove Camera**, **Move Camera**, and **Show Image**.

1. **Setting Camera**: selecting this option will go to that camera's configuration window.
2. **Remove Camera**: selecting this option will delete that camera.
3. **Move Camera**: selecting this option will move that camera to the desired position. Click on this option again to locate the camera.
4. **Show Image**: selecting this option will go back to the Main Page, and video images of that camera will be shown on the window.

Camera and Alarm Actions Log Window (Only for SoftDVR™ Pro)

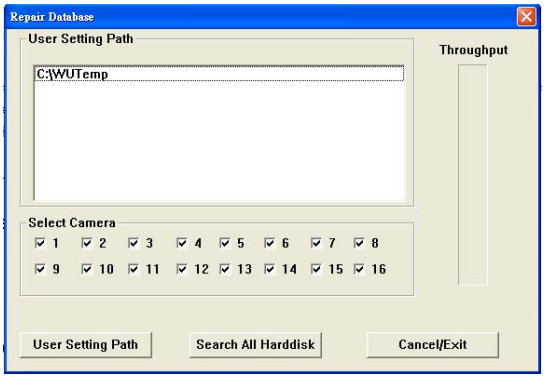
Camera and Alarm Actions Log window is located at the bottom left corner of the Main Screen, showing camera and alarm actions history, and providing information to users about how the camera and the alarm system work.


Start Time
Camera
Alarm Message
End Time
01/14 15:37:51 1(Video Lost) Alarm Notify
01/14 11:42:42 1(Video Lost) Alarm Notify 01/14 15:28:57
01/13 12:33:57 1(Video Lost) Alarm Notify 01/13 12:34:00
01/13 11:11:16 1(Video Lost) Alarm Notify 01/13 11:11:20
01/12 18:19:11 1(Video Lost) Alarm Notify 01/12 18:19:14

Repair Database

SoftDVR™ Lite/Pro provides a **Repair Database** function to re-organize recorded file database. Repairing files' information can increase search and playback speed.

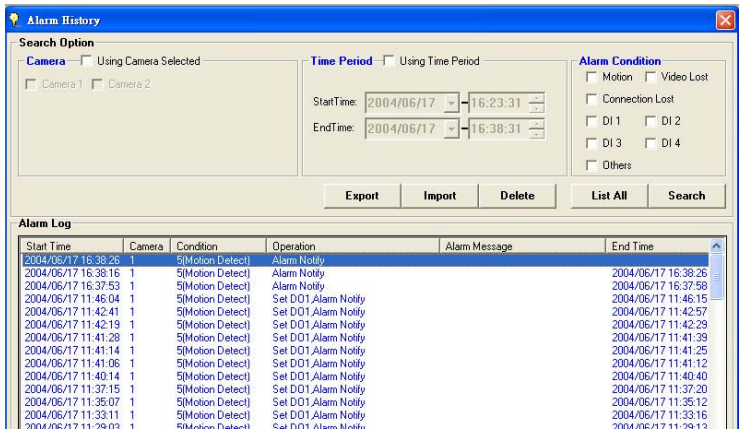
1. Select the camera and the hard disk needed to be repaired.
2. Click on **User Setting Path** to start the repair process.



NOTE If a storage path has not been set in the **Application Setting/General Setting** page, the path will not appear in the **Repair Database** windows.

Alarm History (Only for SoftDVR™ Pro)

Alarm History function is to allow administrators to perform quick search for alarm record by **Camera**, **Time Period**, and **Alarm Condition**.



4

Application Settings

This chapter includes information about how to configure system settings. There are 6 major setting categories for SoftDVR™ Pro, and 5 for SoftDVR™ Lite (SoftDVR™ Lite does not have **Alarm** category.) Administrators should read this chapter carefully in order to set up an IP surveillance system properly.

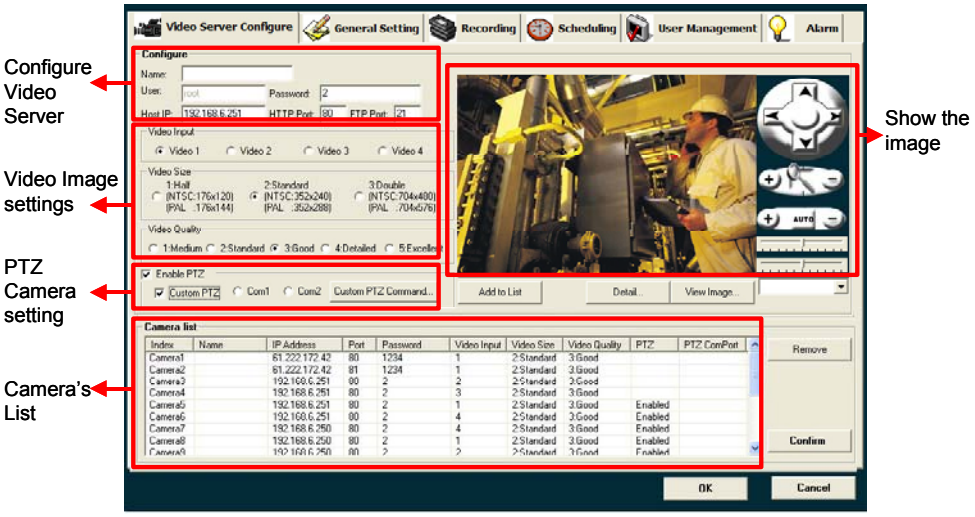
The following topics are covered in this chapter:

- **Configuring Video Server**
  - Adding a New Camera
  - Removing a Camera
  - Configuring Video Server and Upgrading Firmware
- **General Settings**
  - Host Name
  - Auto Execution Settings
  - Text on Image
  - Adding/Removing Storage Hard Disks
  - Camera Display Selection
  - E-mail Settings for Alarm System
  - Web Service Settings (Only for SoftDVR™ Pro)
  - Camera Scan Interval Settings (Only for SoftDVR™ Pro)
- **Recording**
  - Setting up a Recording Action
- **Scheduling**
  - Setting up a Scheduling Task
- **User Management**
  - Administrator's Account
  - Adding a New User
  - Modifying User Privilege
  - Removing an User
- **Alarm (Only for SoftDVR™ Pro)**
  - Adding a New Alarm
  - Modifying an Alarm's Settings
  - Removing an Alarm

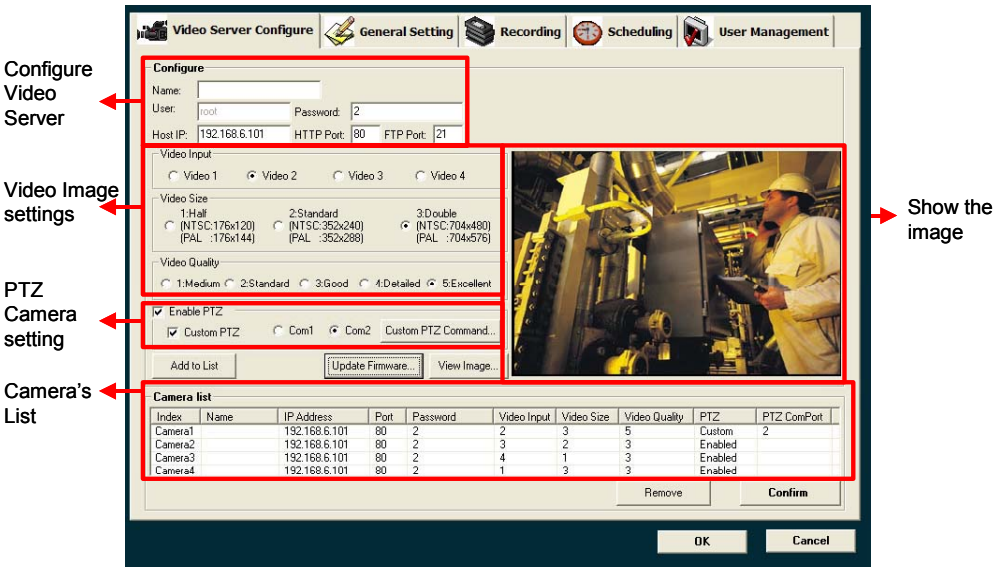
Configuring Video Server

This is the first step to set up a MOXA VPort Series Video Server in SoftDVR™ Pro/Lite. All of the video surveillance functions are based on your configuration.

SoftDVR™ Pro Video Server Configuration Page



SoftDVR™ Lite Video Server Configuration Page



Adding a New Camera

In **Configure** section, administrators need to input the video server's basic settings, including the camera's name (max. 32 bytes), password (max. 16 bytes), host IP (max. 18 bytes), in order to establish the connection with the video server. The user name is root, and is not changeable, since administrators are the only ones who have the access to manage the video server. The HTTP port and FTP port can be changed based on the video server's settings.

1. Select the **Video Input** that the camera is connected to. (For VPort 2110 Video Server, you can use **Video 1** as the video input). Administrators can also configure **Video Size** and **Video Quality** for each camera.

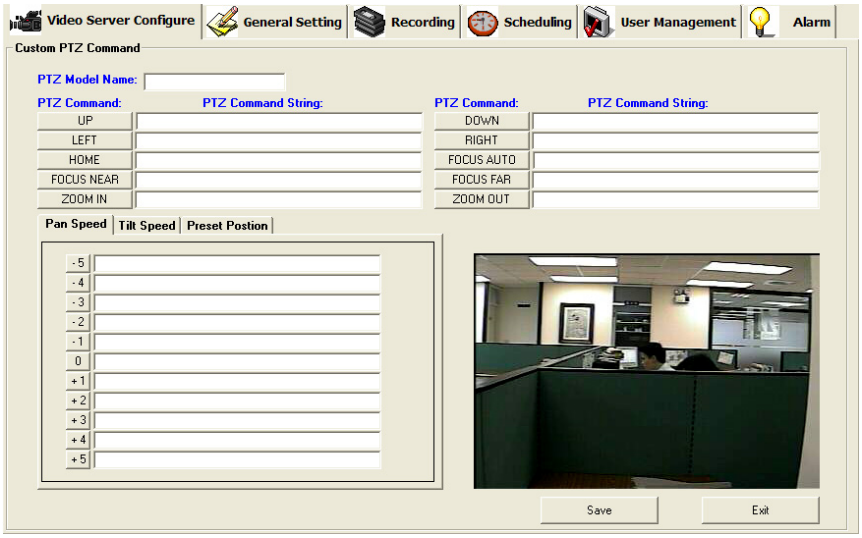
Video Size Selection

	Half	Standard	Double
NTSC	176 x 112	352 x 240	704x 480
PAL	176 x 144	352 x 288	704 x 576

Video Quality Selection

Medium	Standard	Good	Detail	Excellent

2. If you are using a PTZ camera, you can enable the PTZ control functions by selecting **Enable PTZ**. Supported PTZ cameras are the same as VPort 2100 Series Video Server. If you are using a PTZ camera that is excluded from VPort's supported list, select **Custom PTZ**, and then select the **COM Port** that this PTZ camera is connected to. Click on Custom PTZ Command, and then a window will open for programming the custom camera's PTZ control by suing PTZ control protocols provided by the PTZ camera's manufacturer. Click on **Save** to save programming data, and then click on **Exit** to go back to the **Configuration Page**.



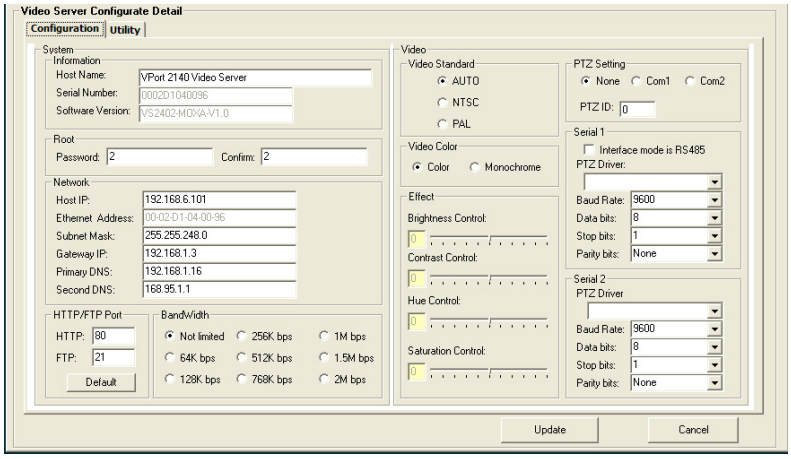
3. After finish configuring the basic settings, click on **View Image** to see the image. If the camera image shown is satisfactory, click on **Add to List** to add this camera to the camera list. When finishing adding cameras, click on **Confirm** to save the information, and then click on **OK** to go back to the **Main Screen**.

Removing a Camera

To remove a camera, select the camera you wish to remove, and then click on **Remove**. Click on **OK** to save the modifications and go back to the **Main Screen**.

Configuring Video Server and Upgrading Firmware

In SoftDVR™ Pro, administrators can click on **Detail** located under the image to view detailed information of the VPort. A VPort's configuration window will open for administrators to see. Administrators can change the VPort's settings manually via SoftDVR™ Pro, and click on **Update** to activate the modifications.

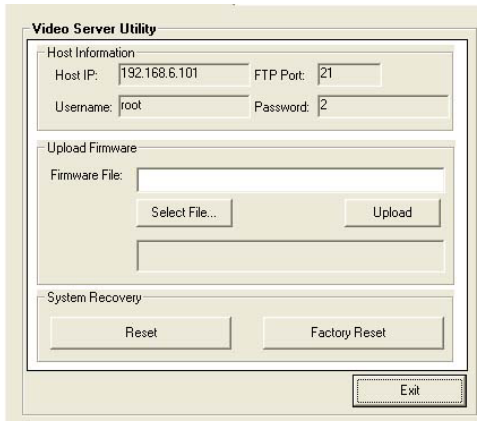


Administrators can also upgrade the VPort's firmware via SoftDVR™ Lite/Pro.

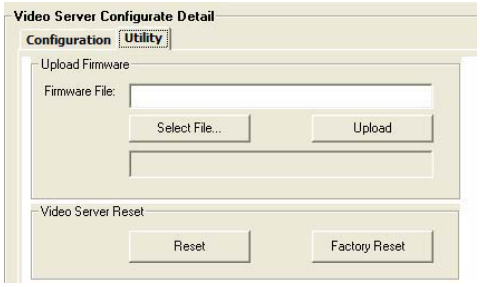
In SoftDVR™ Lite, administrators can find the Upgrade Firmware button in the Video Server Configure page. Click on Upgrade Firmware, and a Video Server Utility window will open next.

1. Select the firmware file you want to upgrade.
2. Click on **Upload** to start upgrading.

In addition, administrators can click on Reset or Factory Reset to recover the system.



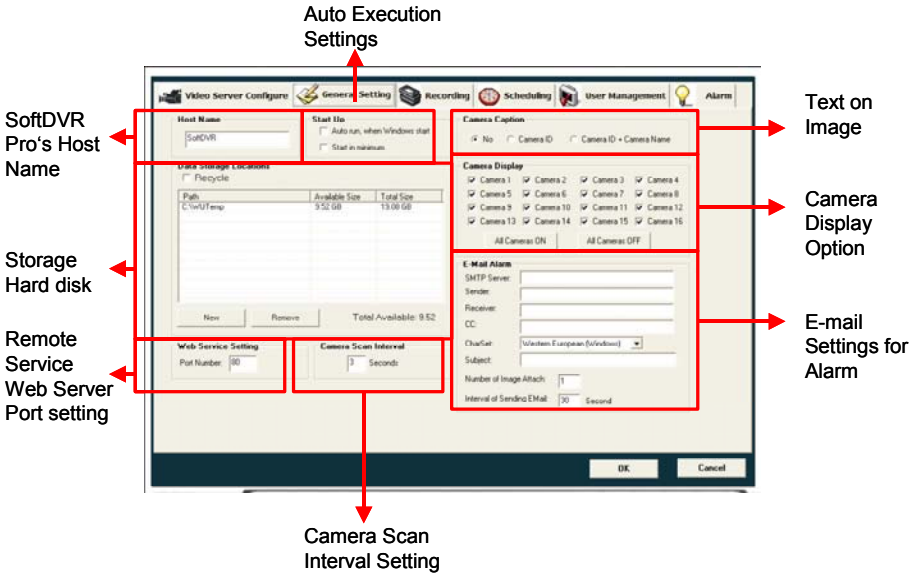
In SoftDVR™ Pro, administrators can find the **Utility** tab in **Video Server Configuration Detail** page. Click on **Utility** tab, follow the steps mentioned above to start upgrading.



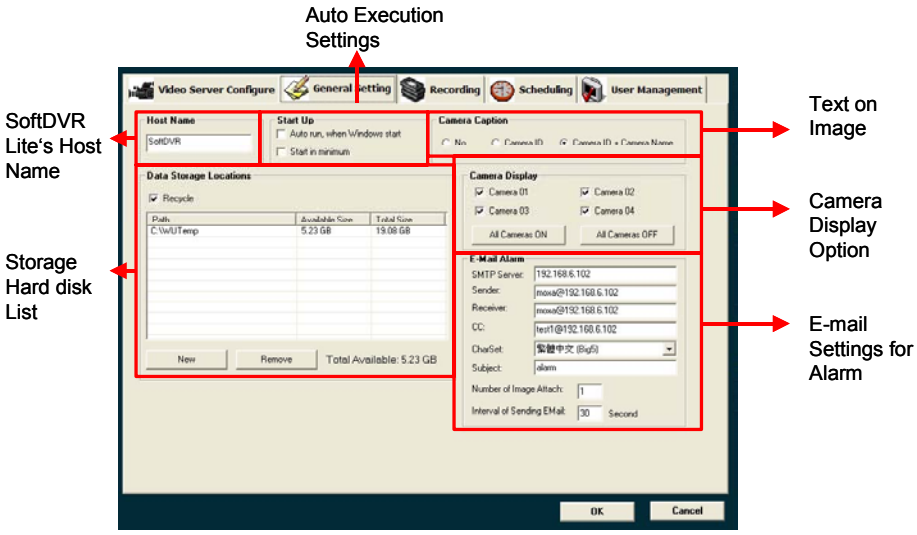
General Settings

General Setting page includes several function settings: **Host Name**, **Auto Execution Settings**, **Text on Image**, **Storage Hard Disks**, **Camera Display**, and **E-mail Settings for Alarm**. In SoftDVR™ Pro, there are two other function settings for the **Remote Service** and **Camera Scan** functions: **Web Service Setting** and **Camera Scan Interval**.

SoftDVR™ Pro General Settings Page



SoftDVR™ Lite General Settings Page



Host Name

Administrators can set a hostname for the PC or notebook that has been installed with SoftDVR™ Lite/Pro to be identified over the network.

Auto Execution Settings

There are 2 modes for **Auto Execution Settings** when starting up the system.

1. **Auto run, when Windows start**: SoftDVR™ Lite/Pro will start up automatically when you boot the system
2. **Start in minimum**: SoftDVR™ Lite/Pro will start up create an icon in the Windows tool bar.

Text on Image

Administrator can set up text to be shown on images in 3 modes: **No**, **Camera IP**, and **Camera ID + Name**. For VPort 2100 Series Video Server, administrators can also set up text to be shown on images with time stamp and camera's name. As a result, video images will have 2 text rows if you set up both.

Adding/Removing Storage Hard Disks

In SoftDVR™ Lite/Pro, administrators can set up maximum of 16 hard disks in a system. In SoftDVR™ Lite/Pro's **Main Screen**, you can verify information about available storage located under **System Time**.

Adding a Hard Disk

1. Click on **New** to search for the hard disk.
2. Select a hard disk from the local hard disks or network hard disks via **My Network Places**. (SoftDVR™ Lite does not support the network storing function)
3. Click on the hard disk to add it into the list. The total storage space will be shown next to the **Remove** button.
4. To ensure that recording remains active, check the **Recycle** box to delete the oldest recording file (FIFO rule) when the total storage space is fewer than 300 MB. If you do not do this, recording will stop when the total storage space is fewer than 300 MB.

Removing a Hard Disk

To remove a hard disk, select the hard disk you would like to remove from the list and click on **Remove**.

NOTE Hard disks cannot share the same directory. For example, c:\123 and c:\456 are not allowed to exist in the list at the same time.

NOTE When the available hard disk space is less than about 300 MB, the system will begin to store video files on the next hard disk to save hard disk space for running the system. When the available storage space on the last hard disk is less than about 500 MB, SoftDVR™ Pro will send an alarm via email to inform the system administrator that the system space is almost full. When the available storage space is less than 300 MB, SoftDVR™ Pro will send a **Storage Full and Stop Recording** alarm via email to the administrator, and recording will stop if recycle mode is not activated.

Camera Display Selection

Administrators can enable and disable camera display manually. Disabled camera images will not be shown on the **Main Screen**.

E-mail Settings for Alarm System

Email is one of the alarm tools provided by SoftDVR™ Lite/Pro. To activate the e-mail alarm system, administrators need to configure e-mail settings, including **SMTP Server**, **Sender**'s e-mail address, **Receiver**'s e-mail address, **CC** to other receivers, **CharSet** for language options, **Subject** for the e-mail's title, **Number of Image Attach** for how many image alarms should be attached, and **Interval of Sending Email** for the frequency of sending e-mail alarms.

Web Service Settings (Only for SoftDVR™ Pro)

SoftDVR™ Pro has the **Remote Service** function that allows client users to access SoftDVR™ Pro from a remote site to view video images, control PTZ cameras, and play historic recorded files via any web browser. Before activating Remote Service function from SoftDVR™ Pro's **Main Screen**, administrators need to set up the port number first to enable web service. The port number setting is based on network system's configuration. If an error message appears when client users access SoftDVR™ Pro via any web browser, change the port number, or check with your network administrator about the port setting.

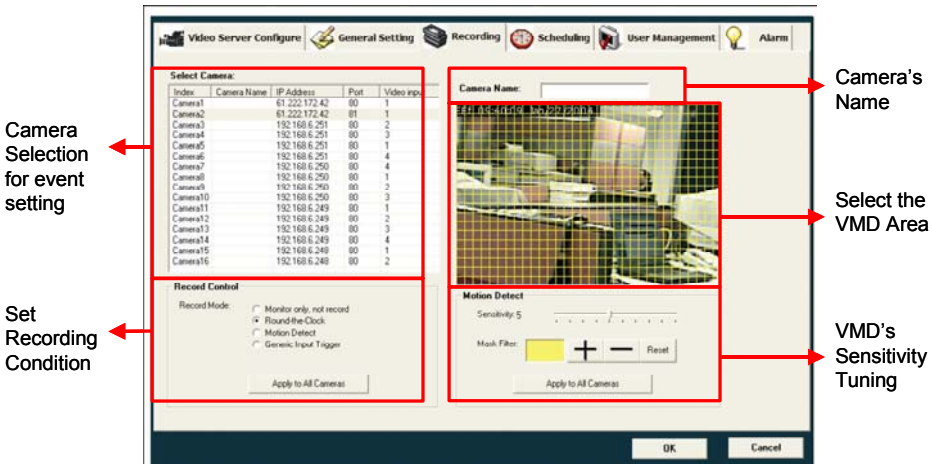
Camera Scan Interval Settings (Only for SoftDVR™ Pro)

Administrators can set up time intervals to customize camera scan frequency.

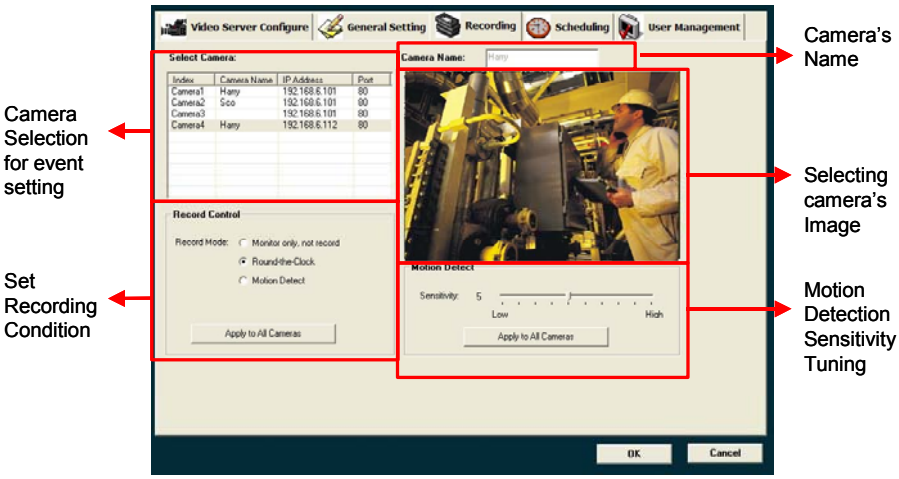
Recording

Recording is one of the main functions that SoftDVR™ Lite/Pro provides. Before setting up the **Recording** function, administrators need to configure the storage space first in **General Settings** page. There are 3 recording modes for SoftDVR™ Pro: **Monitor only, not record**, **Round-the-clock**, **Motion Detection**, and **Generic Input Trigger**. However, SoftDVR™ Lite only provides **Monitor only, not record, Round-the-clock** and **Motion Detection** modes.

SoftDVR™ Pro Recording Page



SoftDVR™ Lite Recording Page



Setting up a Recording Action

1. Select the camera in which you want to set up a recording action from the **Camera Selection for event setting**.
2. Choose a recording mode from **Set Recording Condition**.

   SoftDVR™ Pro provides 4 recording modes, while SoftDVR™ Lite only provides 3.

   Monitor only, not record: camera images are only for viewing, not for recording.

   Round-the-clock: cameras are always recording when the recording function is activated.

   Motion Detect: cameras will start recording when VMD (Video Motion Detection) is triggered.

   Generic Input Trigger (Only in SoftDVR™ Pro): cameras' recording actions can be triggered by DI signals. Administrators can select the DI that is responsible for triggering the recording action.

   If administrators wish to configure each camera with same settings, click on **Apply to All Cameras**.
3. To configure VMD settings in SoftDVR™ Pro, administrators first need to select VMD area by marking blocks in **Select the VMD Area**, and tune the sensitivity in **Motion Detection Sensitivity Tuning**. The operation of VMD's sensitivity is compared the change of pixels with the pre and post video images. When the change is over the sensitivity's setting, the system will trigger the alarm notification.

   If administrators wish to configure each camera with same settings, click on **Apply to All Cameras**.

NOTE VMD is designed to help users build an intelligent video surveillance system. However, the variations in different environments greatly influence VMD performance. For example, different light conditions and lens quality result in different VMD behavior, even for the same environment. For this reason, users should tune the sensitivity to a range of 1 to 10, and test the motion alarm (an "M" will appear in the top right corner when VMD is activated) to determine the optimal performance for the application environment. Users can also use the DI/DO devices that accompany the VMD to make video surveillance more intelligent and precise.

NOTE Light and shadows may generate false alarms. To eliminate this kind of noise, try selecting different VMD areas. In addition, some video cameras generate undesired noise in poor lighting conditions. To prevent false alarms, you need to reduce the noise sensitivity, improve the lighting conditions, or

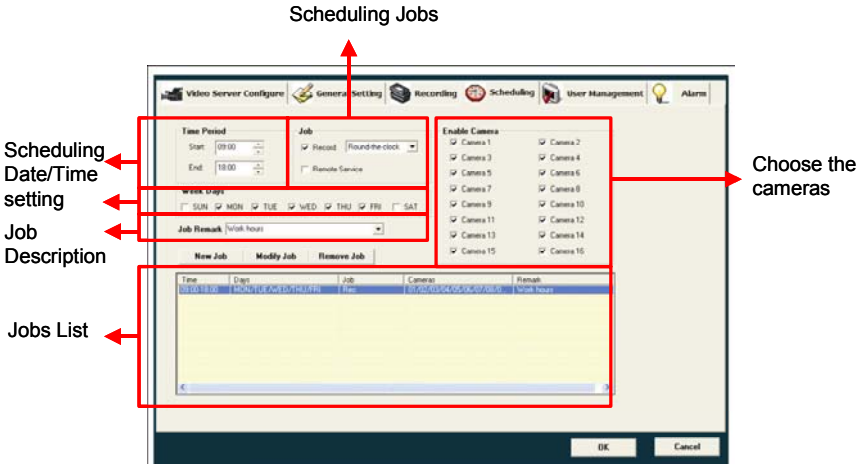
improve camera performance.

4. Click on **OK** to save settings and go back to the **Main Screen**. To activate the **Recording** function, click on the **Recording** button.

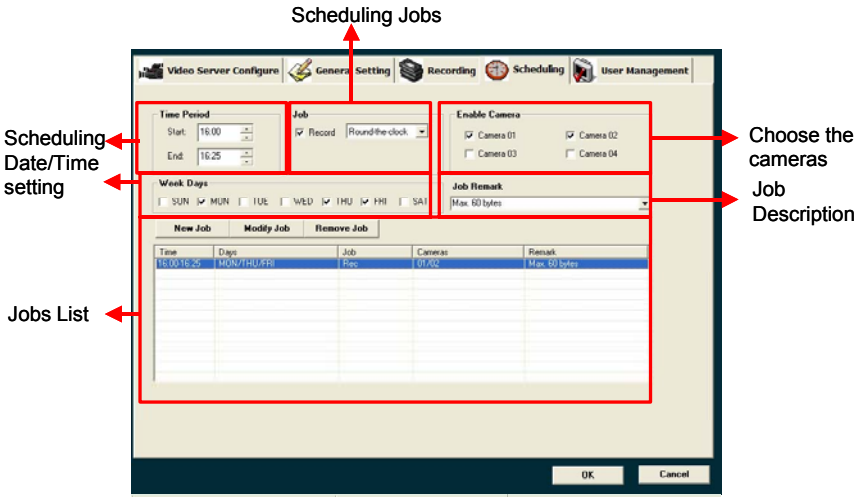
Scheduling

The **Scheduling** function can help administrators set up a timetable for SoftDVR™ Lite/Pro to perform actions at certain time points. The **Scheduling** function provides 2 major tasks: **Recording** and **Remote Service** (only for SoftDVR™ Pro).

SoftDVR™ Pro Scheduling Page



SoftDVR™ Lite Scheduling Page



Setting up a Scheduling Task

1. Select the start time and end time for the duration of this task in **Time Period**, and select **weekdays** on which this task will be performed.
2. SoftDVR™ Pro provides 2 jobs in **Scheduling**, which are **Record** and **Remote Service**, whereas SoftDVR™ Lite provides only **Record**.
3. Select cameras to which you wish to set up a scheduling task in **Enable Cameras**.
4. Administrators can describe the nature of this task in **Job Remark** (max. 60 bytes).
5. When all of the above settings are done, click on **New Job** to add this task into the list. To

modify a task, select the task in the list and modify settings, and then click on **Modify Job** to update. To remove a task, select the task and click on **Remove Job** to delete the task from the list.

6. Click on **OK** to save modifications and go back to the **Main Screen**. To activate the **Scheduling** function, click on the **scheduling** button.

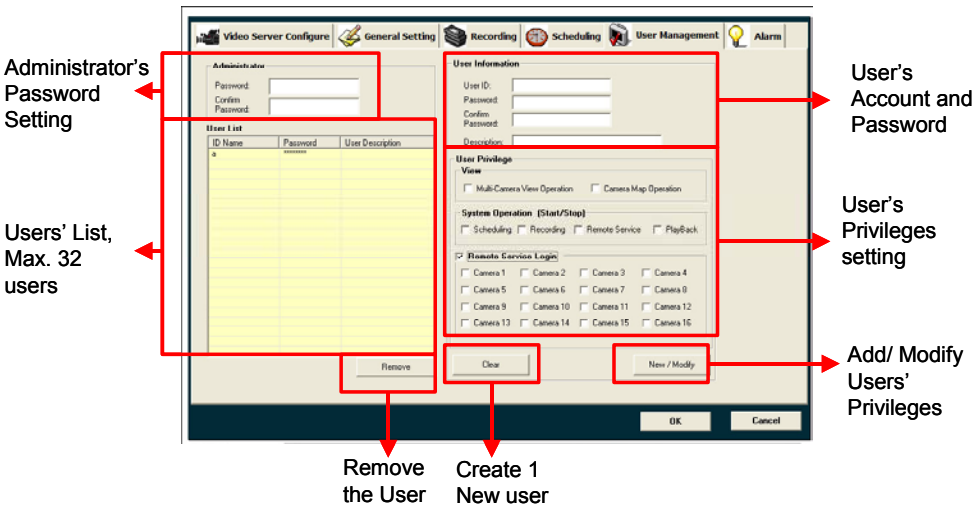
ATTENTION

Since **Scheduling** function includes recording and remote service jobs, users should disable the **Recording** and **Remote Service** functions before activating the **Scheduling**.

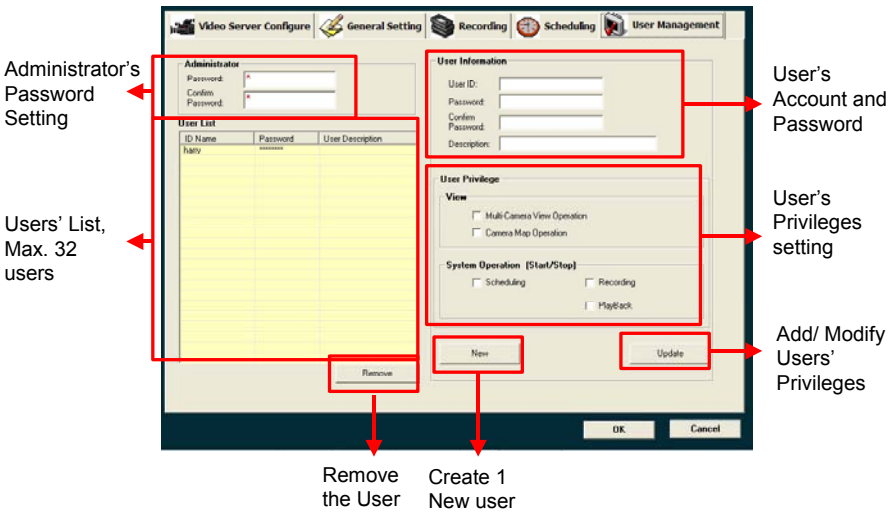
User Management

SoftDVR™ Lite/Pro can include maximum of 32 users in a system. Each user can have different privilege for system operation and camera viewing.

SoftDVR™ Pro User Management Page



SoftDVR™ Lite User Management Page



Administrator's Account

The administrator's account is not enabled by default. Once the password is set or new users are added to the system, the **Login/Logout** authentication system will activate. The username of the administrator's account is always **Admin** or **Administrator**, and the password can be set up in the **User Management** page.

Adding a New User

1. Under **User Information**, enter **User ID**, **Password**, **Confirm Password**, and **Description**.

2. Select **User Privilege**.

   View

   a. **Multi-Camera View Operation**: allowing users to select different viewing formats.

   b. **Camera Map Operation**: allowing users to use the E-map management function.

   System Operation (Start/Stop)

   Administrators can select **Scheduling**, **Recording**, **Playback**, and **Remote Service** options to allow users to use these functions.

   Remote Service Login (only for SoftDVR™ Pro)

   Administrators can select the cameras that administrators allow users to access from a remote site.

3. In SoftDVR™ Pro, click on **New/Modify** to add this new user to the list. Click **Clear** to re-build a new user.

   In SoftDVR™ Lite, click on **Update** to add this new user to the list, and click on **New** to create more users.

   Click on **OK** to save the settings and go back to the **Main Screen**.

Modifying User Privilege

1. Select the user you want to modify from the list. Information and privilege of this user will be shown on **User Management** page.
2. Make necessary changes.
3. Click on **New/Modify** to modify. Click on **OK** to save the settings and go back to the **Main Screen**.

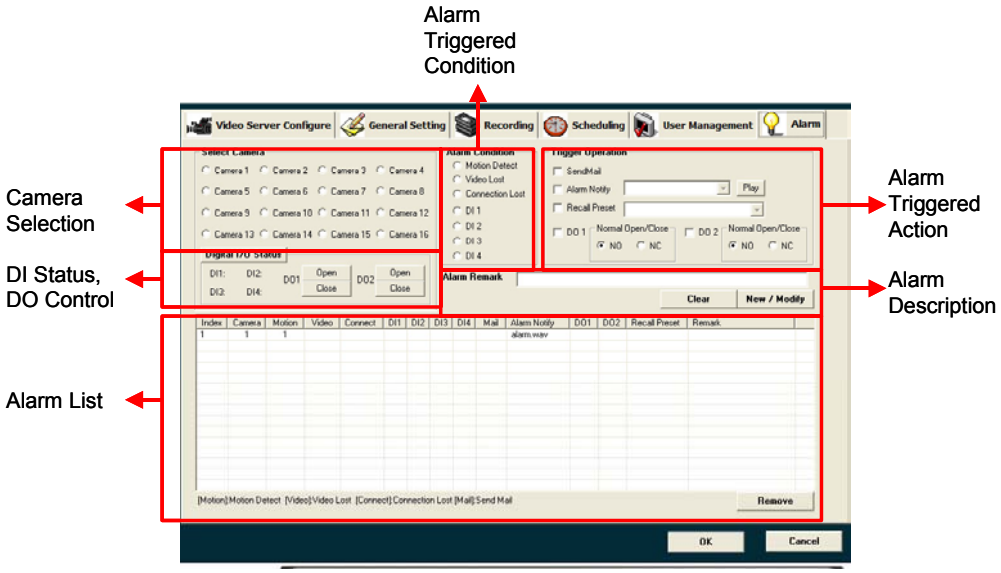
Removing an User

To remove a user from the list, select the user you want to remove and click on **Remove** to delete this user.

Alarm (Only for SoftDVR™ Pro)

SoftDVR™ Pro provides an Alarm function that can integrate DI/DO devices and VPort 2100 Series Video Servers to create a more intelligent video Surveillance system.

SoftDVR™ Pro Alarm Page



Adding a New Alarm

1. Select the camera on which you wish to set up an alarm-triggering recording action.
2. Select **Alarm Condition**.

   Motion Detect: Video Motion Detection (refer to **Recording** section for information on setting up VMD).

   Video Lost: the alarm will go off when if the selected camera or the video line is disconnected and unable to capture video images.

   DI1, DI2, DI3, and DI4: digital input devices that are connected with MOXA VPort products, such as sensors.
3. Set up **Trigger Operation**. Actions that need to be triggered by alarms can use the same triggering condition to activate the actions.

   SendMail: sending an alarm e-mail (refer to **General Setting** section for information on setting up the e-mail system).

   Alarm Notify: playing a WAV sound to notify users. Administrators can select the sound file from the menu and click on Play to check what it sounds like.

   Recall Preset: if the camera is equipped with PTZ function, and its preset position has been set up, administrators can establish the interactions between alarms and the PTZ camera. When an alarm is triggered, the PTZ camera will move to the preset position to monitor and record.

   DO1 and DO2: MOXA VPort Series Video Servers can connect to DI/DO devices, such as an alarm light. Administrators can set up DO conditions to trigger actions by selecting Normal Open or Normal Close of VPorts.

ATTENTION

To set up DI/ DO operations, administrators can click on **Digital I/O Status** to know the current status of DI, and reset the DO status by clicking on **Open** and **Close**.

4. Administrators can input some descriptions to explain this alarm in **Alarm Remark**. After all of the settings are done, click on **New/Modify** to add this new alarm to the list. Click on **Clear** to re-build a new alarm. Click on **OK** to save the settings and go back to the **Main Screen**. Then the alarm system will start running.

Modifying an Alarm's Settings

1. Select the alarm from the list.
2. Change the settings.
3. Click on **New/Modify** to modify. Click **OK** to save the settings and go back to the **Main Screen**.

Removing an Alarm

To remove an alarm from the list, select the alarm and click on **Remove** to delete it.

5

Software Version Release Note

SoftDVR™ Pro IP Surveillance Software	
Version	1.7.1
Date	2004/6/30
File Size	13,130 KB
Product Description	16-ch Video over IP Surveillance Software

SoftDVR™ Lite IP Surveillance Software	
Version	1.2.1
Date	2004/4/21
File Size	11,042 KB
Product Description	4-ch Video over IP Surveillance Software

A

Service Information

This appendix shows you how to contact Moxa for information about this and other products, and how to report problems.

In this appendix, we cover the following topics.

- **MOXA Internet Services**
- **Problem Report Form**
- **Product Return Procedure**

MOXA Internet Services

Customer satisfaction is our number one concern, and to ensure that customers receive the full benefit of our products, Moxa Internet Services has been set up to provide technical support, driver updates, product information, and user's manual updates.

The following services are provided

E-mail for technical support ..... support@moxanet.com.tw

World Wide Web (WWW) Site for product information:

..... http://www.moxa.com

Problem Report Form

MOXA SoftDVR™ Lite/Pro

Customer name:	
Company:	
Tel:	**Fax:**
Email:	**Date:**

1. **Moxa Product:** ☐ SoftDVR™ Lite ☐ SoftDVR™ Pro
2. **Serial Number:** _____

Problem Description: Please describe the symptoms of the problem as clearly as possible, including any error messages you see. A clearly written description of the problem will allow us to reproduce the symptoms, and expedite the repair of your product.

Product Return Procedure

For product repair, exchange, or refund, the customer must:

- Provide evidence of original purchase.
- Obtain a Product Return Agreement (PRA) from the sales representative or dealer.
- Fill out the Problem Report Form (PRF). Include as much detail as possible for a shorter product repair time.
- Carefully pack the product in an anti-static package, and send it, pre-paid, to the dealer. The PRA should be visible on the outside of the package, and include a description of the problem, along with the return address and telephone number of a technical contact.